CLAIMS

1. A task management system comprising:

a judgment unit judging whether or not an execution of a

registration target task gaining an access to a specified

5   resource can be completed before an elapse of deadline time

thereof even if an execution start timing of the registration

target task is delayed when registering the task;

a registration unit registering, as an execution target

task, the registration target task judged such that the

10   execution thereof can be completed before the elapse of the

deadline time; and

a control unit halting a resource assignment to a task

trying to access the specified resource afterward till a

resource assignment to a task having earlier accessed to the

15   specified resource is completed among the tasks registered as

the execution target tasks when switching over the task.

2. A task management system comprising:

a judgment unit judging whether or not an execution of a

20   registration target task gaining an access to a specified

resource can be completed before an elapse of deadline time

thereof even if an execution start timing of the registration

target task is delayed when registering the task;

a registration unit registering, as an execution target

25   task, the registration target task judged such that the

execution thereof can be completed before the elapse of the

deadline time;

23

an execution unit preferentially executing a task having a shorter period of deadline time among the tasks registered as the execution target tasks; and

a control unit halting a resource assignment to a task

5   trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.

10   3. A task management method comprising:

a step of judging whether or not an execution of a registration target task gaining an access to a specified resource can be completed before an elapse of deadline time thereof even if an execution start timing of the registration

15   target task is delayed when registering the task;

a step of registering, as an execution target task, the registration target task judged such that the execution thereof can be completed before the elapse of the deadline time; and

20   a step of halting a resource assignment to a task trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.

25

4. A task management method comprising:

a step of judging whether or not an execution of a

registration target task gaining an access to a specified

resource can be completed before an elapse of deadline time

thereof even if an execution start timing of the registration

target task is delayed when registering the task;

5   a step of for registering, as an execution target task,

the registration target task judged such that the execution

thereof can be completed before the elapse of the deadline

time;

a step of preferentially executing a task having a

10   shorter period of deadline time among the tasks registered as

the execution target tasks; and

a step of halting a resource assignment to a task trying

to access the specified resource afterward till a resource

assignment to a task having earlier accessed to the specified

15   resource is completed among the tasks registered as the

execution target tasks when switching over the task.